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# A PHYLLACHORA OF THE ROYAL PALM

JOHN R. JOHNSTON AND STEPHEN C. BRUNER

(WITH PLATE 2, CONTAINING 2 FIGURES)

Recently while examining some royal palms (*Roystonea regia* Cook) near Rincón, Cuba, the writers were attracted by a fungus which formed conspicuous black, carbonaceous masses several centimeters long on the midribs of the leaves. These masses were seen to be made up of more or less confluent groups of stromata developed in a closely crowded condition beneath the epidermis of the host. The fungus was also present on the leaf-segments but here the growth was more restricted and less conspicuous than on the midrib.

A study of this fungus showed it to be a *Phyllachora* and, so far as could be determined from an examination of the available literature, distinct from any previously described species. It is distinguished from the other species occurring on the Palmae chiefly by the large size of its asci.

The economic importance of the fungus appears to be slight. It has as yet been observed on only a few plants and the damage to these was not serious. A technical diagnosis is offered, as follows:

## ***Phyllachora Roystoneae* sp. nov.**

Stromata subcutaneous, united to parenchyma and epidermis, black, carbonaceous, gregarious, collected in elongate, subconfluent to confluent groups commonly 2–5 cm  $\times$  1–6 mm., the separate stromata subcircular to elliptic, convex to conic-convex, commonly 0.3 to 1 mm. in diameter, phyllogenous; perithecia formed as locules in the stroma, subglobose, crowded, in one layer, 260–430  $\mu$  in diameter, the ostioles erumpent, indistinct or slightly papilliform; asci clavate, rounded or subapplanate at the apex stipitate, 116–186  $\times$  12–20  $\mu$ , eight-spored; paraphyses absent or soon evanescent; spores irregularly monostichous to subdistichous, fusiform, sub-acute at each end, hyaline, thin-walled, stuffed

with granular protoplasm, frequently several-guttulate,  $22-28.4 \times 8-10 \mu$ .

Habitat on living leaves of *Roystonea regia* Cook, Rincón, Havana, Cuba.

ESTACIÓN EXPERIMENTAL AGRONÓMICA,  
SANTIAGO DE LAS VEGAS, CUBA.

EXPLANATION OF PLATE 2

*Phyllachora Roystoneae* Johnston & Bruner

- FIG. 1. A. Perithecia in section, much enlarged.  
B. A single ascus, showing the spores in outline.  
C. Ascospores in outline, also much enlarged.

FIG. 2. A, B, C. Different views of the stromata as seen on the host, natural size and somewhat enlarged.

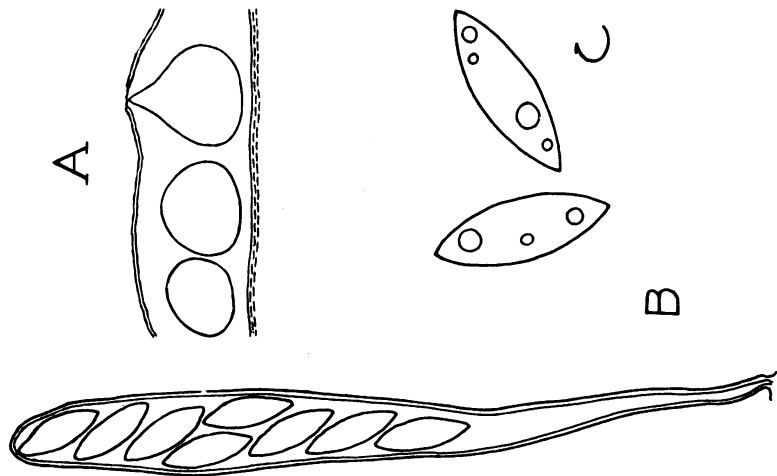


FIG. 1

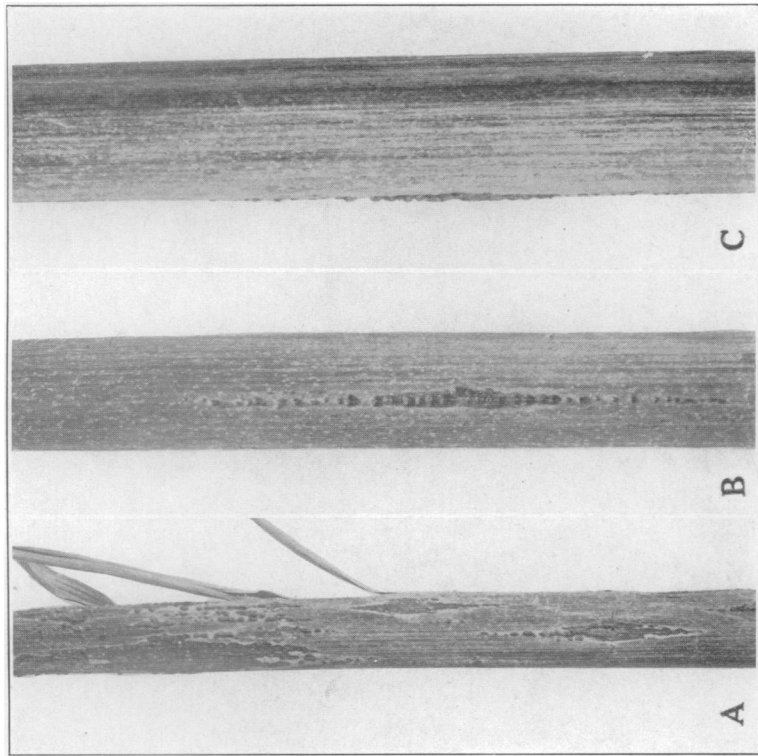


FIG. 2

PHYLLACHORA ROYSTONEAE JOHNSTON & BRUNER